Towards Sustainable Development – Greening EU Development Cooperation

Module 4: SEA, EIA and CRA

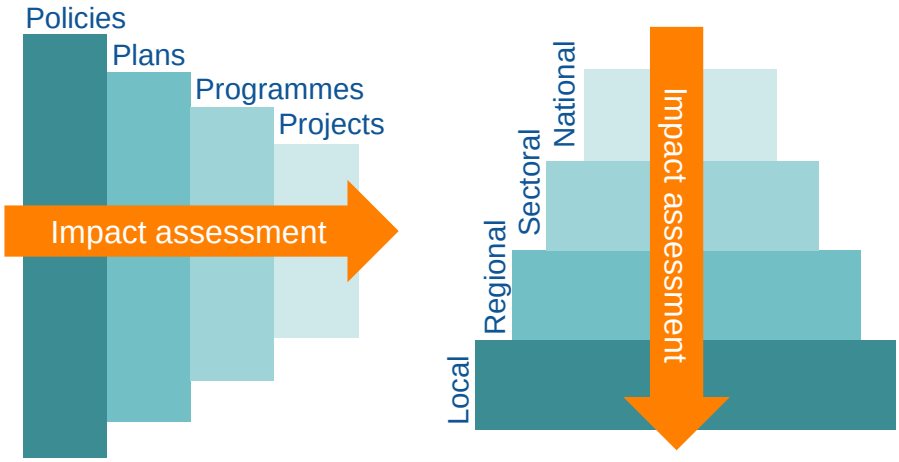
ENTRY POINT		KEY ACTION OR TOOL
1. Problem analysis		• Ensure the problem analysis and stakeholder analysis identify environmental and climate change–related issues
2. Environmental and climate change risk screenings and assessments		• Undertake environmental and climate change risk screenings to determine if the programme/project is environmentally or climatically sensitive, thus requiring a detailed analysis to identify environmental and climate-related risks and opportunities • Undertake an SEA, an EIA or a CRA where necessary
		• SEA/EIA/CRA screening procedures • SEA/EIA/CRA ToR
3. Preparation of the action document		• Ensure that environmental and climate change concerns and opportunities are reflected in programme/project design, that action is foreseen to adequately address them, that necessary budget provisions are made and that relevant indicators are included • Assess whether action justifies a Rio or environment policy marker and contributes to climate change or biodiversity financing
		• SEA/EIA/CRA • Rio markers
4. Budget support assessment framework		• Assess whether the supported policy or strategy adequately integrates environmental and climate-related considerations • Identify complementary measures which can address environmental and climate change challenges and opportunities • Develop relevant performance indicators and disbursement criteria taking into account, where appropriate, key environmental and climate-related objectives
		• SEA
5. Policy dialogue		• Include the environment and climate change in the policy dialogue agenda • Use SEA to support policy development
		• SEA

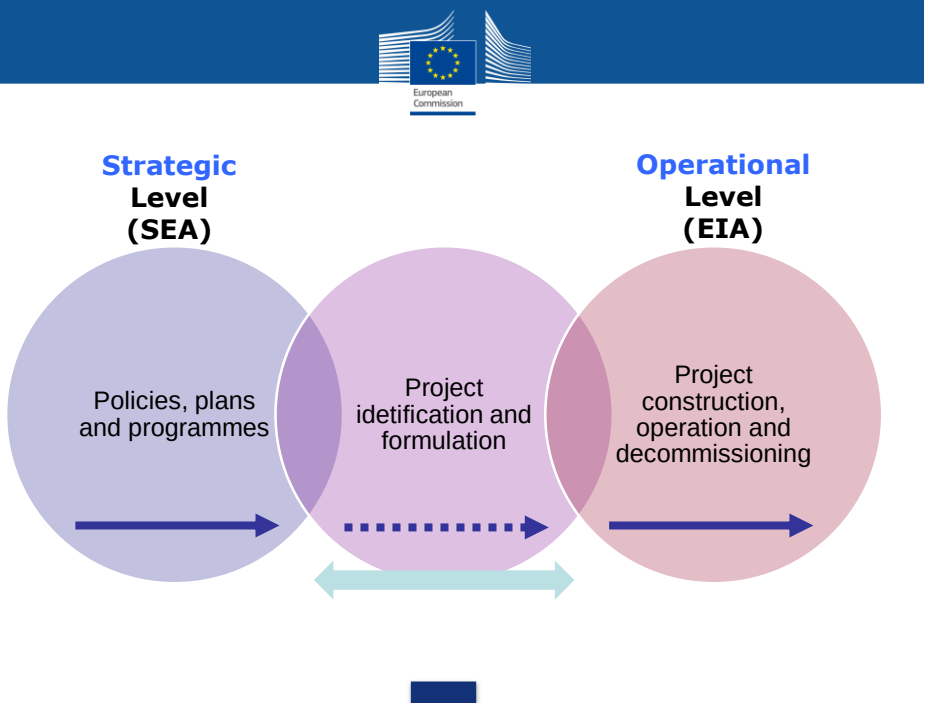
Strategic Environmental Assessment

Origins of SEA

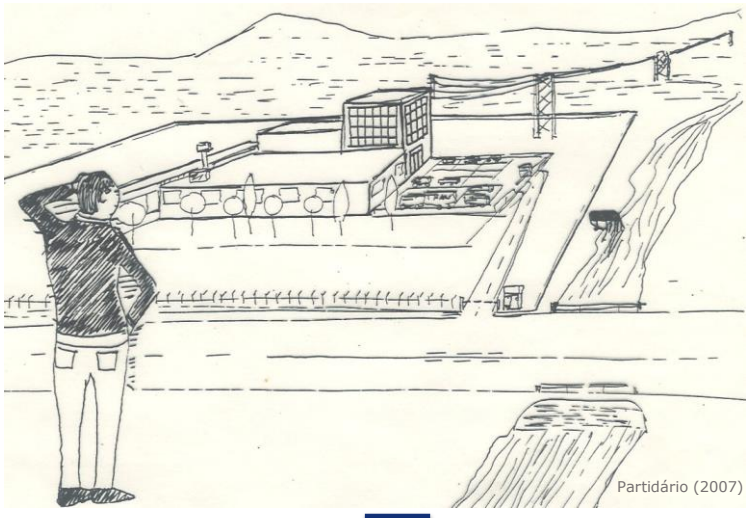
- Originates jointly with EIA processes in 1969, in the US, but starts gaining prominence only in the 1990's
- Arises out of recognition of the limitations of project-level EIA – need to incorporate environmental considerations from early planning stages
- Need to inform strategic decisions about their potential environmental consequences

Tiering approach





EIA: we know what we want to assess



SEA: we have an idea of what we want, but don't know exactly what will be done

EIA vs SEA – Key differences

EIA	SEA
Project-level	Policies, plans & programmes
Focus on informing development consent authorisation process	Focus on enhancing policy-making/planning process
Relatively standard approach	Different approaches available
Widely adopted in legal systems	Few countries have legal system
Quantitative analyses dominate	Qualitative analyses dominate
Analyses alternatives within a project	Analyses alternatives to achieve strategic objectives

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Key guiding questions

Strategic planning (SEA)

- Which are the:
  - objectives?
  - key drivers?
  - strategic options?
  - key restrictions?
  - main interests?
  - most important policies to be met?

Project design (EIA)

- Which are the main characteristics of the project?
- Where is it located?
- Which are its:
  - possible designs?
  - main impacts on the environment?
  - mitigation measures?

What is an SEA?

- An iterative and participatory process, that
  - guarantees the integration of the environment into policy-making and planning processes
  - through the analysis of environmental implications of the different components of a policy, plan or programme.

Common to most SEA systems:

- What are the likely environmental consequences of the PPP?

Also addressed in EU development cooperation approach:

- Are the environmental threats faced by the sector taken being addressed? Are the potential effects of climate change on the sector taken into account? On the proposed actions?
- Are there opportunities to enhance
  - Environmental sustainability?
  - Low carbon development?
  - Climate resilient development?

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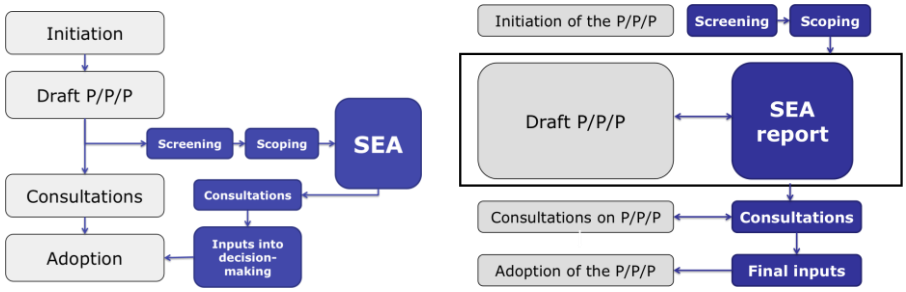
SEA and climate change

- **Strategic planning:** medium- to long-term
- **Climate change becomes fundamental**

Approaches to SEA

Based on draft PPP *vs* in parallel to PPP elaboration *vs* fully integrated



Adapted from: GTZ (nd)

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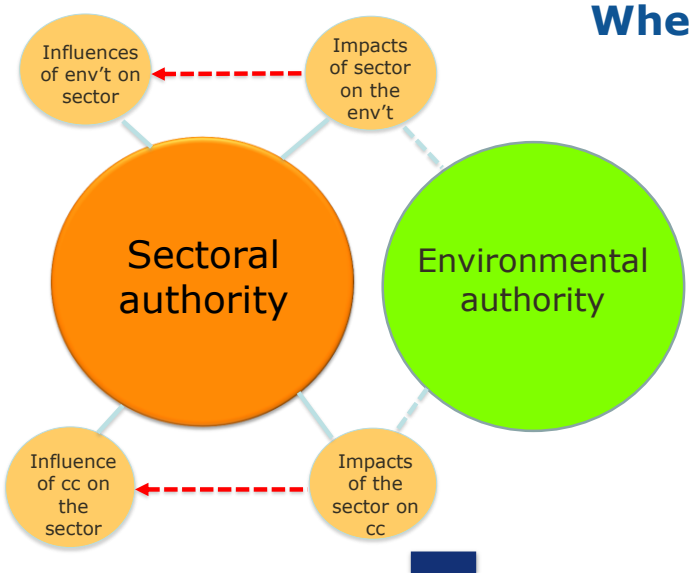
Where is SEA housed?



Guidelines for SEA

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European Commission

Common challenges to SEA

- Weak strategic planning culture
- Weak inter-institutional cooperation
- Weak environmental commitment by sectoral authorities (*this is not my area of work*)
- Obsession with quantification
- Limitations of the regulatory framework
- Confusion between EIA and SEA

Key stages in an SEA

Stakeholder participation

- **Screening**
- **Scoping**
- Baseline "business-as-usual" situation
- Identification of env'l, CC, GE opportunities and constraints of the PPP and alternatives
- Identification of elements that may conflict with or hinder env. policy objectives
- Conclusions and recommendations for formulation of preferred and improved alternative
- Monitoring, performance indicators
- **SEA report**

Example

SEA of Zambia's sugar adaptation strategy – addressing potential impacts

- Introduction of new industrial sector: ethanol distilling
- Potential impacts: vinasse management
- Addressing risks at a strategic level: strengthening capacities of the environmental protection agency

Example

SEA of Rwanda's agriculture sector strategy – seizing opportunities

- Recommendations on soil & water conservation and soil acidity informed the 11th EDF – e.g. performance targets on agro-forestry, reduction of soil acidity in areas of public investment…
- SEA is reference for design of feeder roads development policy and strategy.
- Findings on soil nutrient management informed GoR's review of inputs subsidy scheme and recommendations for pest and disease management to be promoted.

Example

SEA of Montenegro's climate change strategy – enabling opportunities

- Potential contribution to air quality and improved health: co-generation from thermal power plant / reduced burning of coal in households
- Key issues: how to ensure positive contributions would materialise?

http://bankwatch.org/our-work/projects/pljevlja-ii-lignite-power-plant-montenegro

http://etnar.net/two-lungs-for-two-blocks-of-thermal-power-plant/

Environmental Impact Assessment

Key aspects around EIA

- Widely established world-wide
- Applicable to projects with potential significant adverse impacts on the environment
- Decision-informing in development consent procedures
- Traditionally impact-centered
- Often also addresses socio-economic impacts
- Key recent developments:
  - **Ecosystem services focus**
  - **Climate change considerations**

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Some additional notes on EIA

- Normally national EIA systems will apply
- **Environmental Management Plan**
  - Details for the implementation and monitoring of impact mitigation measures
    What? Who? When? How much?
  - Must be reflected in contractual documents
- Link to monitoring and evaluation

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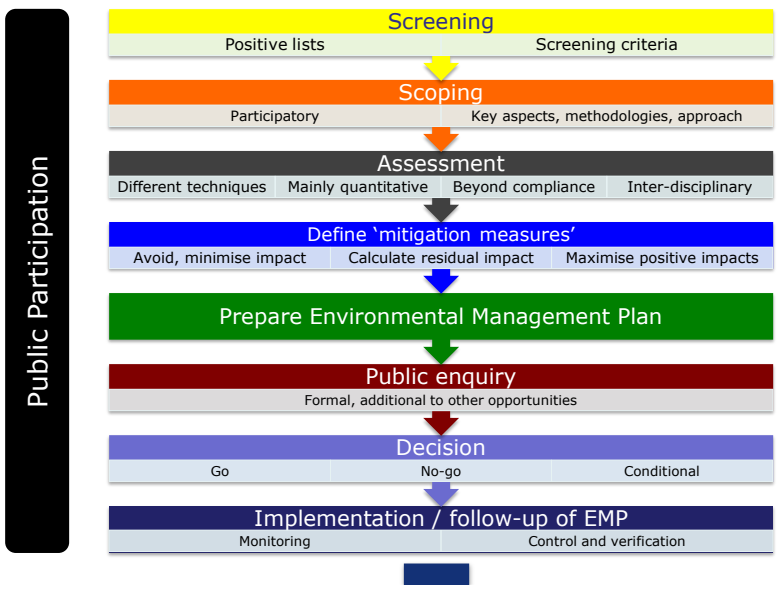
EIA Process



Common shortcomings in EIA systems

- 'Catch-all' approaches
- Limited participation
- Manipulation of data
- 'Salami-slicing'
- Unclear/un-precise
- Little or no follow-up

Climate Risk Assessment

Climate Risk Assessment

Ex ante assessment

- To reduce the project's vulnerability to climate change
- To reduce climate damage by preventive measures
- To optimise positive impacts
- Through technical/scientific studies and stakeholder consultations

CRA structure

Screening

- Identify potential climate risks
- Is a full CRA required?

ToR

- Which issues should the CRA address?
- What expertise is needed?

Climate Risk Assessment study

- Scoping: how to do a CRA, where to focus?
- Study: what are the risks? which measures can be taken?
- Management plan: how/when/who implements measures identified?
- M&E: monitor climate risk, intevention assumptions, and results. Ensure an effective feedback mechanism to improve ongoing and/or future management.

Example

Climate-proofing infrastructure

- What are the characteristics of the weather events for the given return period expected under climate change?

Probability (%)	Expected design life (years) 5	10	20	50	100
50	7.73	14.93	29.36	72.64	144.8
40	10.3	20.08	39.65	98.38	196.3
30	14.52	28.54	56.57	140.7	280.9
25	17.89	35.26	70.02	174.3	348.1
20	22.91	45.32	90.13	224.6	448.6
15	31.27	62.03	123.6	308.2	615.8
10	47.96	95.41	190.3	475.1	949.6
5	97.98	195.5	390.4	975.3	1950
2	248	495.5	990.5	2475	4950
1	498	995.5	1990	4975	9950
	Return period for design				

Example

Anguilla Solar PV Project

1 MW grid-connected, ground mounted Solar PV Project

EIB Required

- A CVA to evaluate potential impacts from climate change on and identify options to increase its resilience, to be incorporated in the design following cost-benefit analysis.

Source: Deeb (2016)

Example

Summary of the Findings CVA (Anguilla)

Wind — PV Plant most sensitive to wind

- Data show wind gusts up to 140 mph
- Could damage system components
- Corrected for climate change based on local study gives projected gusts of 155 mph
- Other data show increase in Category 4 and 5 hurricanes
- Thus, design for the above 1 in 150 year events

Extreme Precipitation — Expected increase in extreme rainfall events

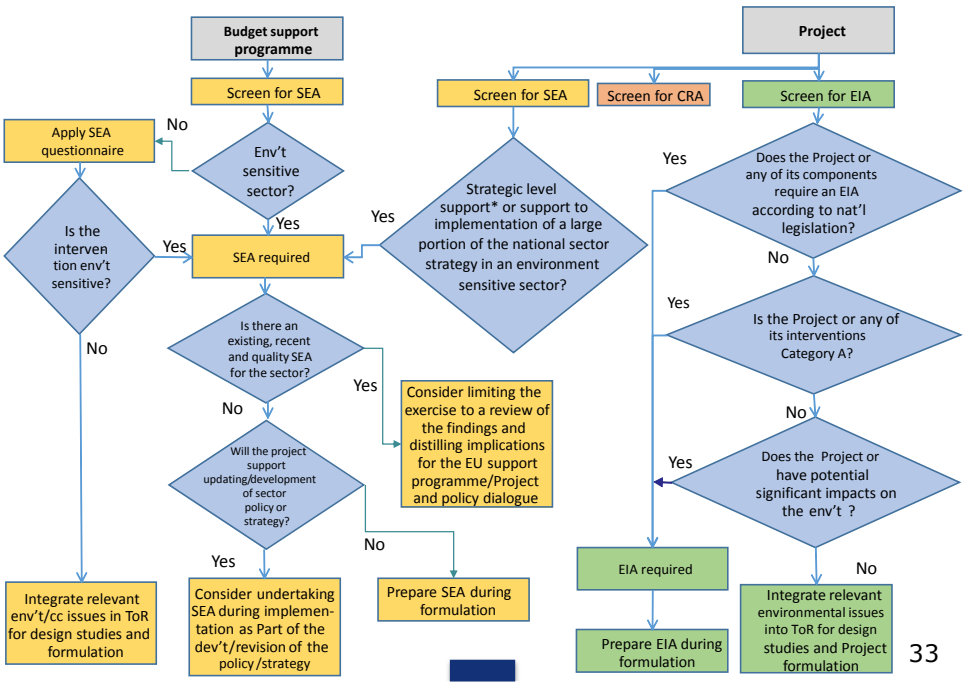
- Flooding and minor erosion possible
- Difficult to design for a 100 year event such as recent hurricane
- Data suggest design for a 25 year event

Heat — 1^0 C temperature increase during 25 year life of the equipment

- In the context of the solar PV plant the projected change is insignificant.

Source: Deeb (2016)

Environmental and Climate Risk Screening


Budget support programme
Screen for SEA
Apply SEA questionnaire
No
Env't sensitive sector?
Yes
Is the interven tion env't sensitive?
Yes
SEA required
No
Is there an existing, recent and quality SEA for the sector?
Yes
Consider limiting the exercise to a review of the findings and distilling implications for the EU support programme/Project and policy dialogue
No
Will the project support updating/development of sector policy or strategy?
Yes
Consider undertaking SEA during implemen- tation as Part of the dev't/revision of the policy /strategy
No
Prepare SEA during formulation
Integrate relevant env't/cc issues in ToR for design studies and formulation
Project
Screen for SEA
Screen for CRA
Screen for EIA
Strategic level support* or support to implementation of a large portion of the national sector strategy in an environment sensitive sector?
Yes
Does the Project or any of its components require an EIA according to nat'l legislation?
Yes
No
Is the Project or any of its interventions Category A?
Yes
No
Does the Project or have potential significant impacts on the env't ?
Yes
No
EIA required
Prepare EIA during formulation
Integrate relevant environmental issues into ToR for design studies and Project formulation

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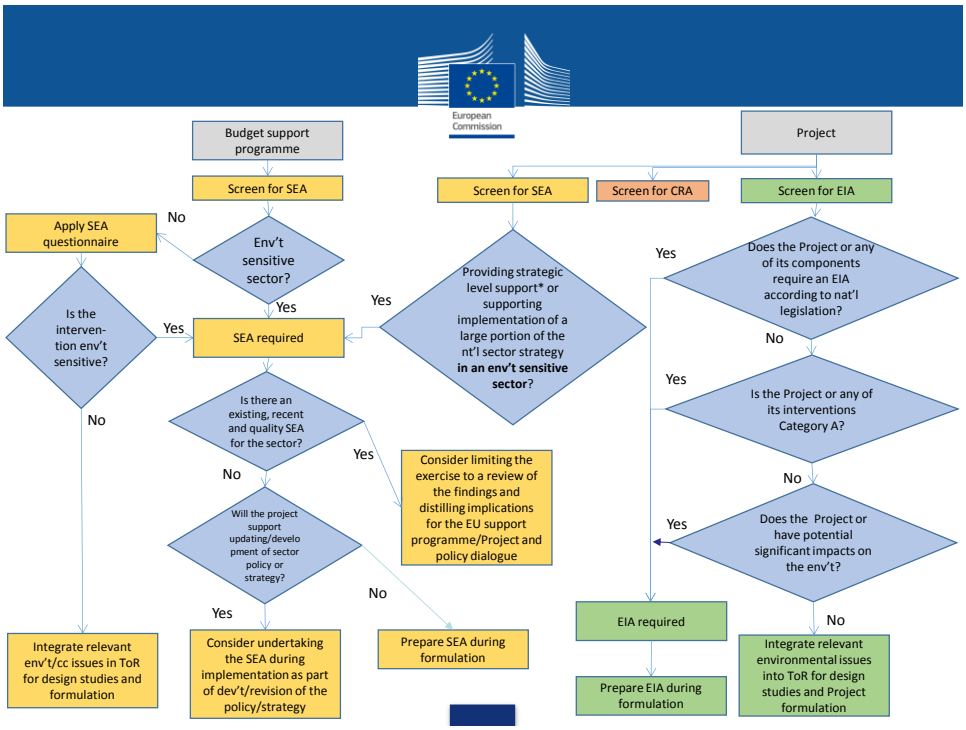
European Commission
Budget support programme
Screen for SEA
Apply SEA questionnaire
No
Env't sensitive sector?
Yes
Is the interven- tion env't sensitive?
Yes
SEA required
No
Is there an existing, recent and quality SEA for the sector?
Yes
Consider limiting the exercise to a review of the findings and distilling implications for the EU support programme/Project and policy dialogue
No
Will the project support updating/develo pment of sector policy or strategy?
Yes
Consider undertaking the SEA during implementation as part of dev't/revision of the policy/strategy
No
Prepare SEA during formulation
Integrate relevant env't/cc issues in ToR for design studies and formulation
Project
Screen for SEA
Screen for CRA
Screen for EIA
Providing strategic level support* or supporting implementation of a large portion of the nt'l sector strategy in an env't sensitive sector?
Yes
Does the Project or any of its components require an EIA according to nat'l legislation?
Yes
No
Is the Project or any of its interventions Category A?
Yes
No
Does the Project or have potential significant impacts on the env't?
Yes
No
EIA required
Prepare EIA during formulation
Integrate relevant environmental issues into ToR for design studies and Project formulation

Supporting document for submission of draft Action documents to QSG:

Outcome of SEA Screening (Strategic Environmental Assessment) **(tick as appropriate)**
☐ **An SEA will be undertaken** ☐ **Key environmental and climate-related aspects will be addressed during formulation** ☐ **No SEA required, no further action required**
Explain briefly on which basis this decision was reached. **If no further action is required (third option), justify clearly why.** **If further assessment is to be carried out during formulation (first 2 options above), briefly describe the main aspects that will need to be the subject of such assessment.**

What else is needed to supporting the submission of draft Action documents to QSG (hint, look at your folders)

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